## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Indra LAKSONO, et al.

Title: SYSTEM AND METHOD TO PROVIDE VIDEO TO A PLURALITY OF

WIRELESS DISPLAY DEVICES

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## **BRIEF IN SUPPORT OF APPEAL**

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## I. REAL PARTY IN INTEREST (37 C.F.R. § 41.37(c)(1)(i))

The real party in interest in this appeal is ViXS Systems, Inc., the assignee in the entirety, as evidenced by the assignment recorded at Reel 012644, Frame 0842.

## II. RELATED APPEALS AND INTERFERENCES (37 C.F.R. § 41.37(c)(1)(ii))

There are no interferences or other appeals that will directly affect, or be directly affected by, or have a bearing on the Board's decision in this appeal.

### III. STATUS OF CLAIMS (37 C.F.R. § 41.37(c)(1)(iii))

#### A. TOTAL NUMBER OF CLAIMS IN APPLICATION

There are fifteen (15) claims pending in the application.

## B. STATUS OF ALL THE CLAIMS

1. Claims pending:

Claims 31, 32, 58-63, and 73-79.

2. Claims withdrawn from consideration but not canceled:

NONE.

3. Claims allowed:

NONE.

4. Claims objected to:

NONE.

5. Claims rejected:

Claims 31, 32, 58-63, and 73-79 are rejected under 35 U.S.C. § 103(a).

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#### 6. Claims canceled:

Claims 1-30, 33-57, and 64-72.

#### C. CLAIMS ON APPEAL

There are fifteen (15) claims on appeal, claims 31, 32, 58-63, and 73-79.

## IV. STATUS OF AMENDMENTS (37 C.F.R. § 41.37(c)(1)(iv))

No amendments were submitted subsequent to the Final Office Action mailed October 28, 2008 (hereinafter, "the Final Action").

### V. SUMMARY OF THE CLAIMED SUBJECT MATTER (37 C.F.R. § 41.37(c)(1)(v))

The following summary is provided to give the Board the ability to quickly determine where the claimed subject matter appealed herein is described in the present application and is not to limit the scope of the claimed invention.

Independent claim 31 recites the features of a method comprising: determining at a display device a data transmission rate between the display device and a wireless access point (see, e.g., access point 141 and display device 151, FIG. 2, and p. 10, lines 23-27); determining at the display device a select channel of a plurality of channels of a multicast channel based on the data transmission rate, wherein each channel of the plurality of channels is used to provide a different version of a plurality of versions of a video stream, and where each version of the video stream includes a different resolution scale (see, e.g., p. 9, lines 15-21, p. 11, lines 1-7, p. 16, lines 4-26, and multicast table 850, FIG. 8); and accessing the select channel to receive a version of the video stream associated with the select channel (see, e.g., p. 11, lines 7-9 and p. 15, lines 18-28).

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Independent claim 58 recites the features of a method comprising: determining, at a networked display device, a first data transmission rate of a transmission connection of the networked display device at a first time (see, e.g., access point 141 and display device 151, FIG. 2, and p. 10, lines 23-27); determining, at the networked display device, a first multicast address from a plurality of multicast addresses based on the first data transmission rate, each of the plurality of multicast addresses associated with a corresponding version of a plurality of versions of a video stream (see, e.g., p. 9, lines 15-21, p. 11, lines 1-7, p. 16, lines 4-26, and multicast table 850, FIG. 8); and receiving, at the networked display device, a first version of the plurality of versions of the video stream via the transmission connection using the first multicast address for a first duration (see, e.g., p. 11, lines 7-9 and p. 15, lines 18-28).

Independent claim 76 recites the features of a display device configured to: determine a data transmission rate between the display device and a wireless access point (see, e.g., access point 141 and display device 151, FIG. 2, and p. 10, lines 23-27); determine a select channel of a plurality of channels of a multicast channel based on the data transmission rate, wherein each channel of the plurality of channels is used to provide a different version of a plurality of versions of a video stream, and where each version of the video stream includes a different resolution scale (see, e.g., p. 9, lines 15-21, p. 11, lines 1-7, p. 16, lines 4-26, and multicast table 850, FIG. 8); and access the select channel to receive a version of the video stream associated with the select channel (see, e.g., p. 11, lines 7-9 and p. 15, lines 18-28).

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# VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL (37 C.F.R. § 41.37(c)(1)(vi))

- A. Claims 31, 74, and 76-78 are rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,831,917 (hereinafter, "Cheriton") in view of U.S. Patent No. 6,532,562 (hereinafter, "Chou") and further in view of U.S. Patent App. Pub. No. 2001/0044835 (hereinafter, "Schober") as set forth in the Final Action.
- B. Claim 32 is rejected under 35 U.S.C. § 103(a) as unpatentable over Cheriton in view of Chou and Schober and further in view of U.S. Patent App. Pub. No. 2002/0080802 (hereinafter, "Sachs") as set forth in the Final Action.
- C. Claims 75 and 79 are rejected under 35 U.S.C. § 103(a) as unpatentable over Cheriton in view of Chou and Schober and further in view of U.S. Patent App. Pub. No. 2002/0067730 (hereinafter, "Hinderks") as set forth in the Final Action.
- D. Claims 58, 59, and 73 are rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 7,191,246 (hereinafter, "Deshpande") in view of Chou as set forth in the Final Action.
- E. Claim 60 is rejected under 35 U.S.C. § 103(a) as unpatentable over Deshpande in view of Chou and further in view of Schober as set forth in the Final Action.
- F. Claim 61 is rejected under 35 U.S.C. § 103(a) as unpatentable over Deshpande in view of Chou and further in view of Hinderks as set forth in the Final Action.

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- G. Claim 62 is rejected under 35 U.S.C. § 103(a) as unpatentable over Deshpande in view of Chou and further in view of U.S. Patent No. 6,198,941 (hereinafter, "Aho") as set forth in the Final Action.
- H. Claim 63 is rejected under 35 U.S.C. § 103(a) as unpatentable over Deshpande in view of Chou and Aho and further in view of Hinderks as set forth in the Final Action.

#### VII. ARGUMENTS (37 C.F.R. § 41.37(c)(1)(vii))

For purposes of this appeal, claims 31, 32, 74, 75, 76, 77, and 78 stand or fall together, claims 75 and 79 stand or fall together, claims 58-60 and 62 stand or fall together, and claims 61 and 63 stand or fall together.

## A. Rejection of Claims 31, 74, and 76-78 under 35 U.S.C. § 103(a)

At page 4 of the Final Action, claims 31, 74, and 76-78 are rejected under 35 U.S.C. § 103(a) as unpatentable over a combination of Cheriton, Chou, and Schober.

#### 1. Rejection of Claims 31 and 76

For ease of reference, independent claims 31 and 76 are reproduced below:

- 31. (Previously Presented) A method comprising:
- determining at a display device a data transmission rate between the display device and a wireless access point;
- determining at the display device a select channel of a plurality of channels of a multicast channel based on the data transmission rate, wherein each channel of the plurality of channels is used to provide a different version of a plurality of versions of a video stream, and where each version of the video stream includes a different resolution scale; and
- accessing the select channel to receive a version of the video stream associated with the select channel.

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- 76. (Previously Presented) A display device, the display device configured to: determine a data transmission rate between the display device and a wireless access point;
- determine a select channel of a plurality of channels of a multicast channel based on the data transmission rate, wherein each channel of the plurality of channels is used to provide a different version of a plurality of versions of a video stream, and where each version of the video stream includes a different resolution scale; and access the select channel to receive a version of the video stream associated with the select channel.

Claim 31 recites the features of "determining at a display device a data transmission rate between the display device and a wireless access point" and "determining *at the display device* a select channel of a plurality of channels of a multicast channel based on the data transmission rate . . . ." Claim 76 recites similar subject matter. The Examiner relies on a combination of Cheriton and Chou for these features.

Cheriton teaches that each subscriber 550 joins the same "single source multicast group (S, G)" and it is the NAT compatible switch 300 (which is separate from the subscribers 550) that remaps different multicast streams to different subscriber groups via virtual network address translation mapping such that "subscribers 550 to such a single-source, virtual host multicast would likely be unable to detect a source transition because *all of the traffic will appear to the subscribers [550] as originating from a single virtual host (S, G)*". *See, e.g., Cheriton*, col. 3, lines 22-41, col. 3, line 65 – col. 4, line 53, and col. 5, lines 19-21 (emphasis added). Further, Cheriton teaches that the subscriber 550 subscribes to the same multicast address, and it is the NAT compatible switch 300 that determines which of the low-resolution channel or the high resolution channel is to be transmitted to the subscriber 550. Therefore, it is the NAT compatible switch 300, rather than the subscriber 550/display device, that determines the select channel of a plurality of channels, and not the **display device** as recited by claims 31 and 76. Accordingly,

Cheriton fails to disclose or render obvious at least the features of "determining **at the display device** a first channel of a plurality of channels" as recited by claim 31 and the similar feature recited by claim 76.

The Examiner acknowledges this deficiency of Cheriton and thus turns to Chou as teaching "determining at a display device a first data transmission rate . . . , wherein subscribing at the display device to a first channel of a plurality of channels of a multimedia channel is based on the first data transmission." *Final Action*, p. 5. The Examiner reasons that it would be obvious to "add the data transmission rate determining by Chou to the method disclosed by Cheriton" in that the "motivation would have been to enable *the receiver* to only be able to subscribe to channels that matched the receiver's available bandwidth, therefore allowing the system to preserve bandwidth." *Id.* (emphasis added). The Examiner errs in this assertion.

As noted above, it is the NAT compatible switch 300 at the transmitter of the system of Cheriton, not the receivers, that remaps and transmits different multicast streams to different subscriber groups via virtual network address translation mapping such that "subscribers 550 to such a single-source, virtual host multicast would likely be unable to detect a source transition because *all of the traffic will appear to the subscribers [550] as originating from a single virtual host (S, G)*". *See, e.g., Cheriton*, col. 3, lines 22-41, col. 3, line 65 – col. 4, line 53, and col. 5, lines 19-21 (emphasis added). In contrast, Chou allegedly teaches that it is the receivers that select a particular multicast group based on data transmission rate. One cannot simply "add the data transmission rate determining by Chou to the method disclosed by Cheriton" as Cheriton and Chou teach conflicting and mutually-exclusive techniques. Rather, it will be appreciated that the technique of Chou would have to wholly replace the express technique described by Cheriton. However, Cheriton teaches that the benefit of the NAT-assigned mapping is that the

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subscriber is unlikely to detect a source transition, so one of ordinary skill in the art, considering Cheriton in its entirety, would not only not find it obvious to implement the technique of Chou in the system of Cheriton, but would further recognize that doing so would be contrary to the express intent of Cheriton. Thus, it would not be obvious to combine the teachings of Cheriton and Chou as proposed by the Examiner.

The Examiner responds by asserting that, in effect, the Applicant is relying on the embodiment of Figure 5 of Cheriton, when, according to the Examiner, the embodiments of Figure 7 of Cheriton are the more relevant portions of Cheriton. See Final Action, p. 2. In particular, the Examiner asserts that "[a] later embodiment goes a step further and discloses that the router (figure 7, part 700) can be used to translate different resolutions to different multicast channels by selectively dropping portions from the high resolution source to create a lower resolution video (column 6, line 63 to column 7, line 8)." See Final Action, pp. 2-3. The Examiner's reliance on the embodiments of Figure 7 of Cheriton does not alter the deficiencies of Cheriton and Chou with respect to claim 31 for at least the reason that Figure 7 merely illustrates a particular implementation of the broader concept of Cheriton described above. Figure 7 of Cheriton describes a "NAT-compatible switch or router" and does not contemplate the operation of a receiver. Further, as with Figure 5 of Cheriton discussed above, for Figure 7 Cheriton again contemplates that all traffic appears as coming from the same virtual host. See Cheriton, col. 6, lines 58-62 ("[a]gain, since all subscribes in the multicast host group are sing data transmitted from the same virtual host (S,G) this 'behind the scenes' switching from source (S',G') to backup source (S'',G'') is transparent to the users."). With respect to the "later embodiment" of Figure 7 alluded to by the Examiner, Cheriton merely discloses that the head end router can provide "different translations based on aspects of the packet data" and provides

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an example of translating low resolution component packets to one multicast channel supporting receivers with a "low bandwidth link" and translating high resolution component packets to another multicast channel supporting receivers with a "high bandwidth link." *Id.*, col. 6, line 63 – col. 7, line 8. However, Cheriton fails to disclose for this "later embodiment" that it is the receiver that determines which of the two multicast channels the receiver is to subscribe. Rather, as with the remainder of the disclosure of Cheriton, it is up to the NAT-compatible switch/router to make this decision. Thus, as with the "embodiments of Figure 5", the "embodiments of Figure 7" likewise are incompatible for combination with the mutually-exclusive technique of Chou for the reasons described above.

Schober does not compensate for the deficiencies of Cheriton and Chou with respect to claims 31 and 76. Cheriton, Chou, and Schober, individually or in combination, fail to disclose or render obvious at least one feature recited by independent claims 31 and 76. Accordingly, the proposed combination of Cheriton, Chou, and Schober fails to disclose or render obvious each and every feature recited by claims 31 and 76. Claims 31 and 76 therefore are allowable under 35 U.S.C. § 103(a).

## 2. Rejection of Claims 74, 77, and 78

As discussed in section 1 above, Cheriton, Chou and Schober, individually or in combination, fail to disclose or render obvious at least one feature of each of independent claims 31 and 76. Accordingly, the proposed combination of Cheriton, Chou and Schober also fails to disclose or render obvious each and every feature recited by claims 74, 77, and 78 at least by virtue of their respective dependencies from one of claim 31 or claim 76. Claims 74, 77, and 78 therefore are allowable under 35 U.S.C. § 103(a).

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## B. Rejection of Claim 32 under 35 U.S.C. § 103(a)

At page 7 of the Final Action, claim 32 is rejected under 35 U.S.C. § 103(a) as unpatentable over a combination of Cheriton, Chou, Schober, and Sachs.

As discussed above, Cheriton, Chou and Schober, individually and in combination, fail to disclose or render obvious at least one feature recited by independent claim 31. The Examiner does not assert that Sachs discloses or renders obvious those features of claim 31 absent from the teachings of Cheriton, Chou, and Schober, nor in fact does Sachs compensate for the deficiencies of Cheriton, Chou, and Schober. Accordingly, the proposed combination of Cheriton, Chou, Schober, and Sachs fails to disclose or render obvious each and every feature recited by claim 32 at least by virtue of its dependency from claim 31. Claim 32 therefore is allowable under 35 U.S.C. § 103(a).

## C. Rejection of Claims 75 and 79 under 35 U.S.C. § 103(a)

At page 7 of the Final Action, claims 75 and 79 are rejected under 35 U.S.C. § 103(a) as unpatentable over a combination of Cheriton, Chou, Schober, and Hinderks.

For ease of reference, claims 75 and 79 are reproduced below:

- 75. (Previously Presented) The method of claim 31, wherein determining the select channel of the plurality of channels comprises performing a table lookup based on the data transmission rate to identify the select channel.
- 79. (Previously Presented) The display device of claim 76, wherein the display device is configured to determine the select channel of the plurality of channels by performing a table lookup based on the data transmission rate to identify the select channel.

As discussed above, Cheriton, Chou and Schober, individually and in combination, fail to disclose or render obvious at least one feature of each of independent claims 31 and 76. The Examiner does not assert that Sachs discloses or renders obvious those features of claims 31 and

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76 absent from the teachings of Cheriton, Chou, and Schober. Accordingly, the proposed combination of Cheriton, Chou, Schober, and Sachs fails to disclose or render obvious each and every feature recited by claims 75 and 79 at least by virtue of their dependencies from claims 31 and 76, respectively.

Moreover, these claims recite additional non-obvious features. The Examiner relies on the passage of Hinderks at paragraph 0054 as disclosing the features of the display device determining the select channel by "performing a table lookup based on the data transmission rate to identify the select channel." However, the relied-upon passage of Hinderks provides that the database 101 (which the Examiner equates to the recited "table") is a "*server-side* database." *See Hinderks*, para. 0054 (emphasis added). As the display device is not on the "server side," it is unclear as to how the display device would perform a table lookup into the "server-side database 101" of Hinderks and the Examiner fails to provide any explanation to this effect. The Examiner therefore fails to make a prima facie case of obviousness for claims 75 and 79. Claims 75 and 79 therefore are allowable under 35 U.S.C. § 103(a).

#### D. Rejection of Claims 58, 59, and 73 under 35 U.S.C. § 103(a)

At page 8 of the Final Action, claims 58, 59, and 73 are rejected under 35 U.S.C. § 103(a) as unpatentable over a combination of Deshpande and Chou.

#### 1. Rejection of Claim 58

For ease of reference, independent claim 58 is reproduced in its entirety below:

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- 58. (Previously Presented) A method comprising:
- determining, at a networked display device, a first data transmission rate of a transmission connection of the networked display device at a first time;
- determining, at the networked display device, a first multicast address from a plurality of multicast addresses based on the first data transmission rate, each of the plurality of multicast addresses associated with a corresponding version of a plurality of versions of a video stream; and
- receiving, at the networked display device, a first version of the plurality of versions of the video stream via the transmission connection using the first multicast address for a first duration.

Claim 58 recites the features of "determining, at the networked display device, a first multicast address from a plurality of multicast addresses based on the first data transmission rate, each of the plurality of multicast addresses associated with a corresponding version of a plurality of versions of a video stream." The Examiner asserts that Deshpande teaches the features of claim 58, with the exception of the claimed feature of determining a first multicast address from a plurality of multicast addresses based on the first data transmission rate, for which the Examiner turns to Chou. The Examiner reasons that it would be obvious to "add the data transmission rate determining by Chou to the method disclosed by [Deshpande]" in that the "motivation would have been to enable the receiver to only be able to subscribe to channels that matched the receiver's available bandwidth, therefore allowing the system to preserve bandwidth." *Final Action*, p. 9 (emphasis added). The Examiner errs in this assertion.

Deshpande teaches a "method of selecting a data transmission rate for a [sic] heterogeneous network clusters [using] the results of reports of local reception bandwidth and determines an appropriate data rate that either minimizes data loss or minimizes a cost function relating distortion and local bandwidth utilization for each cluster." *Deshpande*, Abstract. Local reception bandwidths 86 for receivers are reported using RTCP reports, which a server periodically evaluates "to identify clusters on the basis of local reception bandwidth 86 and to

facilitate dynamic revision of the data rate for selected data streams directed to each of the clusters 88." *Id.*, col. 4, lines 39-44. A clustering algorithm is used "to identify clusters of receivers reporting similar bandwidth." *Id.*, col. 4, lines 45-48. As taught by Deshpande, the "clustering step is carried out periodically at the server 86 using the current cluster centers as the initial cluster centers for the next clustering update." *Id.*, col. 5, lines 1-3. Deshpande further teaches that the "frequency of cluster updating is limited by the processing capabilities of the server. . . ." *Id.*, col. 5, lines 9-11. After the bandwidth clusters are identified, the server selects "a data transmission rate . . . for the data stream directed to each cluster 88." *Id.*, col. 5, lines 15-18.

The disclosure of Deshpande fails to suggest to one of ordinary skill in the art to use the server/transmitter-side multicasting taught by Deshpande at a receiver-subscribed multicasting as recited by claim 58. As a first issue, while the background of Deshpande discloses that prior-art systems implement receiver-subscribed multicasting of different video streams, the detailed description of Deshpande pertaining to the invention of Deshpande fails to disclose the use of receiver-subscribed multicasting. To wit, it is clear from the background section that the inventors of Deshpande were aware of multicasting techniques, but multicasting is never mentioned or otherwise referenced in the detailed description section that describes the actual invention of Deshpande. The omission of any mention of multicasting in this section discredits the assertion that the video streams generated by the clustering technique of Deshpande are distributed via receiver-subscribed multicasting. As a second issue, in the technique of Deshpande, the display receivers periodically report their local reception bandwidths, which are used by the server 86 to group the display receivers in clusters having similar local reception bandwidths, and the server 86 then provides to each cluster of display receivers a version of a

video stream that is compatible with the local reception bandwidth of the cluster. Thus, the periodically readjusted clustering as taught by Deshpande is accomplished by changing the video stream transmitted to a display receiver at the server 86 in response to a change in the cluster to which the display receiver is assigned, rather than having the display receivers play an active role in reassigning themselves to new video streams when clustering changes. Thus, it is the server 86 that assigns video streams to particular display receivers based on their bandwidth, rather than the display receivers selecting their own video streams based on their bandwidth. This approach is contrary to the technique of having the receiver subscribe to a particular multicast group based on data transmission rate as allegedly taught by Chou. As with Cheriton, the technique of Chou cannot be "added" to the system of Deshpande, but rather the technique of Chou would have to replace the server-based technique of Deshpande.

The Examiner again responds by asserting that the Applicant is considering the wrong "embodiment" and the allegedly applicable "embodiment" of Deshpande teaches that the "receiver selects which layers to receive by observing it's own packet loss (which occur when its own bandwidth is not high enough) to receive the current video quality level) and dropping layers when the packet loss gets to high" and cites the passage of Deshpande at col. 4, line 58 to col. 5, line 32 in support of this assertion. *Final Action*, p. 4. The Examiner further asserts that Deshpande "even states that the server takes no active roll in allocating the bandwidth to the receivers, which goes against what the applicant is arguing," but the Examiner fails to cite any passage of Deshpande in support of this assertion. A review of the passage of Deshpande cited by the Examiner does not reveal any support for the Examiner's position that Deshpande teaches that it is the receiver that "selects which layers to receive" or that the "server takes no active roll in allocating the bandwidth." As such, the Examiner's position finds no support in the disclosure

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of Deshpande. It remains that Deshpande and Chou would not be obvious to combine as proposed, and even if so combined, the combination of these references would not disclose or render obvious each and every feature of claim 58.

## 2. Rejection of Claims 59 and 73

As discussed in section 1 above, Deshpande and Chou, individually or in combination, fail to disclose or render obvious at least one feature of each of independent 58. Accordingly, the proposed combination of Deshpande and Chou also fails to disclose or render obvious each and every feature recited by claims 59 and 73 at least by virtue of their dependency from claim 58. Claims 59 and 73 therefore are allowable under 35 U.S.C. § 103(a).

#### E. Rejection of Claim 60 under 35 U.S.C. § 103(a)

At page 10 of the Final Action, claim 60 is rejected under 35 U.S.C. § 103(a) as unpatentable over a combination of Deshpande, Chou, and Schober.

As discussed above, Deshpande and Chou, individually or in combination, fail to disclose or render obvious at least one feature recited by independent claim 58. The Examiner does not assert that Schober discloses or renders obvious those features of claim 58 absent from the teachings of Deshpande and Chou, nor does Schober in fact compensate for the deficiencies of Deshpande and Chou. Accordingly, the proposed combination of Deshpande, Chou, and Schober fails to disclose or render obvious each and every feature recited by claim 60 at least by virtue of its dependency from claim 58. Claim 60 therefore is allowable under 35 U.S.C. § 103(a).

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## F. Rejection of Claim 61 under 35 U.S.C. § 103(a)

At page 11 of the Final Action, claim 61 is rejected under 35 U.S.C. § 103(a) as unpatentable over a combination of Deshpande, Chou, and Hinderks.

For ease of reference, claim 61 is reproduced below:

61. (Previously Presented) The method of claim 58, wherein determining the first multicast address comprises performing a table lookup based on the first data transmission rate.

As discussed above, Deshpande and Chou, individually or in combination, fail to disclose or render obvious at least one feature recited by independent claim 58. The Examiner does not assert that Hinderks discloses or renders obvious those features of claim 58 absent from the teachings of Deshpande and Chou, nor does Hinderks in fact compensate for the deficiencies of Deshpande and Chou. Accordingly, the proposed combination of Deshpande, Chou, and Hinderks fails to disclose or render obvious each and every feature recited by claim 61 at least by virtue of its dependency from claim 58.

Moreover, claim 61 recite2 additional non-obvious features. The Examiner relies on the passage of Hinderks at paragraph 0054 as disclosing the features of the display device determining the select channel by "performing a table lookup based on the data transmission rate to identify the select channel." As noted above, the relied-upon passage of Hinderks provides a "server-side database 101" and the Examiner has failed to provide any explanation as to how the display device (which is not on the "server side") would perform a table lookup into the "server-side database 101" of Hinderks. The Examiner therefore fails to make a *prima facie* case of obviousness for claim 61. Claim 61 therefore is allowable under 35 U.S.C. § 103(a).

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## G. Rejection of Claim 62 under 35 U.S.C. § 103(a)

At page 11 of the Final Action, claim 62 is rejected under 35 U.S.C. § 103(a) as unpatentable over a combination of Deshpande, Chou, and Aho.

As discussed above, Deshpande and Chou, individually or in combination, fail to disclose or render obvious at least one feature recited by independent claim 58. The Examiner does not assert that Aho discloses or renders obvious those features of claim 58 absent from the teachings of Deshpande and Chou, nor does Aho in fact compensate for the deficiencies of Deshpande and Chou. Accordingly, the proposed combination of Deshpande, Chou, and Aho fails to disclose or render obvious each and every feature recited by claim 62 at least by virtue of its dependency from claim 58. Claim 62 therefore is allowable under 35 U.S.C. § 103(a).

## H. Rejection of Claim 63 under 35 U.S.C. § 103(a)

At page 11 of the Final Action, claim 63 is rejected under 35 U.S.C. § 103(a) as unpatentable over a combination of Deshpande, Chou, Hinderks, and Aho.

As discussed above, Deshpande, Chou and Hinderks, individually or in combination, fail to disclose or render obvious at least one feature recited by claim 62. The Examiner does not assert that Aho discloses or renders obvious those features of claim 62 absent from the teachings of Deshpande, Chou, and Hinderks, nor does Aho in fact compensate for the deficiencies of Deshpande, Chou, and Hinderks. Accordingly, the proposed combination of Deshpande, Chou, Hinderks, and Aho fails to disclose or render obvious each and every feature recited by claim 63 at least by virtue of its dependency from claim 62. Claim 63 therefore is allowable under 35 U.S.C. § 103(a).

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#### VIII. CONCLUSION

For at least the reasons given above, all pending claims are allowable and the Appellants therefore respectfully request reconsideration and allowance of all claims and that this patent application be passed to issue.

Respectfully submitted,

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## IX. APPENDIX OF CLAIMS INVOLVED IN THE APPEAL (37 C.F.R. § 41.37(c)(1)(viii))

The text of each claim involved in the appeal is as follows:

- 1. 30. (Canceled)
- 31. (Previously Presented) A method comprising:
- determining at a display device a data transmission rate between the display device and a wireless access point;
- determining at the display device a select channel of a plurality of channels of a multicast channel based on the data transmission rate, wherein each channel of the plurality of channels is used to provide a different version of a plurality of versions of a video stream, and where each version of the video stream includes a different resolution scale; and
- accessing the select channel to receive a version of the video stream associated with the select channel.
- 32. (Previously Presented) The method of Claim 31, wherein the select channel is based on a IEEE 802.11 standard.
  - 33. 41. (Canceled)
  - 42. 57. (Canceled)
  - 58. (Previously Presented) A method comprising:
  - determining, at a networked display device, a first data transmission rate of a transmission connection of the networked display device at a first time;
  - determining, at the networked display device, a first multicast address from a plurality of multicast addresses based on the first data transmission rate, each of the plurality of multicast addresses associated with a corresponding version of a plurality of versions of a video stream; and

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- receiving, at the networked display device, a first version of the plurality of versions of the video stream via the transmission connection using the first multicast address for a first duration.
- 59. (Previously Presented) The method of claim 58, wherein receiving the first version of the plurality of versions of the video stream comprises:
  - processing, at the networked display device, a plurality of transmitted data packets associated with the first multicast address and having data representative of the first version of the plurality of versions of the video stream.
- 60. (Previously Presented) The method of claim 58, wherein the transmission connection comprises a wireless connection between the networked display device and an access point.
- 61. (Previously Presented) The method of claim 58, wherein determining the first multicast address comprises performing a table lookup based on the first data transmission rate.
  - 62. (Previously Presented) The method of claim 58, further comprising:
  - determining, at the networked display device, a second data transmission rate of a transmission connection of the networked display device at a second time subsequent to the first time;
  - determining a second multicast address from the plurality of multicast addresses based on the second data transmission rate; and
  - receiving, at the networked display device, a second version of the plurality of versions of the video stream via the transmission connection using the second multicast address for a second duration subsequent to the first duration.
- 63. (Previously Presented) The method of claim 62, wherein determining the second multicast address comprises performing a table lookup based on the second data transmission rate.
  - 64. 72. (Canceled)

- 73. (Previously Presented) The method of claim 58, wherein receiving the first version of the plurality of versions comprises associating the networked display device with a multicast group associated with the multicast address.
- 74. (Previously Presented) The method of claim 31, wherein accessing the select channel to receive the version of the video stream comprises associating the display device with a multicast group associated with the select channel.
- 75. (Previously Presented) The method of claim 31, wherein determining the select channel of the plurality of channels comprises performing a table lookup based on the data transmission rate to identify the select channel.
  - 76. (Previously Presented) A display device, the display device configured to: determine a data transmission rate between the display device and a wireless access point;
  - determine a select channel of a plurality of channels of a multicast channel based on the data transmission rate, wherein each channel of the plurality of channels is used to provide a different version of a plurality of versions of a video stream, and where each version of the video stream includes a different resolution scale; and access the select channel to receive a version of the video stream associated with the select channel.
- 77. (Previously Presented) The display device of claim 76, wherein the display device comprises a wireless display device.
- 78. (Previously Presented) The display device of claim 76, wherein the display device is configured to access the select channel to receive the version of the video stream by associating the display device with a multicast group associated with the select channel.
- 79. (Previously Presented) The display device of claim 76, wherein the display device is configured to determine the select channel of the plurality of channels by performing a table lookup based on the data transmission rate to identify the select channel.

## X. EVIDENCE APPENDIX (37 C.F.R. § 41.37(c)(1)(ix))

The Examiner's prior art rejections rely on the following references:

- U.S. Patent No. 6,198,941 to Aho et al.
- U.S. Patent No. 6,532,562 to Chou et al.
- U.S. Patent No. 6,831,917 to Cheriton
- U.S. Patent No. 7,191,246 to Deshpande
- U.S. Patent App. Pub. No. 2001/0044835 to Schober et al.
- U.S. Patent App. Pub. No. 2002/0067730 to Hinderks et al.
- U.S. Patent App. Pub. No. 2002/0080802 to Sachs et al.

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## XI. RELATED PROCEEDINGS APPENDIX (37 C.F.R. § 41.37(c)(1)(x))

None.

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